APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,952	12/05/2001	Yves Schabes	2001323-0014	8503

24280   7590   03/03/2008
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EXAMINER
TO, BAOQUOC N

ART UNIT	PAPER NUMBER
2162	

MAIL DATE	DELIVERY MODE
03/03/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/004,952	SCHABES ET AL.
	Examiner	Art Unit	
	BAOQUOC N. TO	2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>25 January 2008</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-6,16-18,20,21,25,27,34-36,39 and 66-68</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-6, 16-18, 20-21, 25, 27, 34-36, 39 and 66-68</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date <u>01/25/2008</u>.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application
6)☐ Other: _____ .

U.S. Patent and Trademark Office
PTOL-326 (Rev. 08-06)   Office Action Summary   Part of Paper No./Mail Date 20080221

DETAILED ACTION

The Finality of action dated on 07/26/2007 is withdrawn based on the new ground of the rejection.

1.   Claims 16-18, 21, 25, 27, 34, 66 are amended in the amendment filed on 01/25/2008. Claims 1-6, 16-18, 20-21, 25, 27, 34-36, 39, 64-68 are pending in this application.

Response to Arguments

2.   Applicant's arguments with respect to claims 1 and 66 have been considered but are moot in view of the new ground(s) of rejection.

Applicants argues "Smith fails to teaches or suggest a query comprises of one or more fully specified terms and one or more at least partially unspecified query terms or specifying an attribute when no term is provided at all."

Examine respectfully disagrees with the above argument. Smith discloses "the search query comprises a plurality of words and a plurality of attributes where the attributes define condition imposed on the search" (col. 3, lines 3-6). Smith also discloses attributes are wildcards including *,?... (col. 5, lines 52-67 to col. 6, lines 1-48). This attributes are defined the condition to imposed the search condition as applicant claimed partially unspecified terms. These attributes partially specified what information is being searched for unspecified term and along with the full term. In the given example, such as "Agatha Christie was born_ [location]" which also use the symbol to as the unspecified term with attribute "location" as the condition imposed on the search.

It is the same concept as Smith. Furthermore, according to claim the condition for

evaluation of the search terms does not required both full specified term and partially

unspecified term to be retrieved, rather as long as one term to be retrieved such as full

term or partially unspecified term as claimed "determining one or more matches for

query, wherein the criterion for determining one of said matches specified that a relative

order of at least one term of said query need not be preserved with respect to at least

one other term included in the query." Then, the display will output the both or either

"fully specified term" or just "unspecified search term" as Smith discloses "/" in (col. 5,

lines 40-51).

Applicant also argues "Masand also fails to teach or suggest a query comprises

of one or more fully specified terms and one or more at least partially unspecified

terms."

Examiner respectfully disagrees with the above argument. As explained above,

Smith disclosed the this concept in (col. 3, lines 3-6 and col. 5, lines 52-67 to col. 6,

lines 1-48). Masand used to further reinforce the concept of formulating the query using

both word and symbol representing the partially unspecified term (col. 4, lines 30-33) (a

query may contain a query text string, for example, a series of words, numbers and/or

other symbols, and ask for the identification of documents which contain the same text

string).

Applicant also argues "regarding claim 2, applicants note that on page 3 of the

present Office Action the examiner state that Smith teaches identifying documents that

contain the one or more at least partially unspecified terms, seemingly in contradiction

with the Examiners statement 10 lines earlier that Smith does not explicitly teach...

Similar, with regard to claims 27, 65 and 68..."

Examiner respectfully disagrees with the above argument. Smith discloses

unspecified term such as "/", *,?... and retrieval of unspecified term such as "apple is

red"...(col. 5, lines 40-67 to col. 6, lines 1-48). Therefore, Smith discloses unspecified

term and examiner does not contradict himself.

Claims 2-3, 21, 25, 27, 34-36, 39, 64-65 and 67-68 are rejected under the reason

as indicated above.

Applicant argues "...claims 17-18 ultimately depend on claim 1 and are allowable

for the reason as indicate above. The argument above regarding the failure of Smith

and Masand to teach or suggest the limitation of receiving a query comprised of one or

more fully specified terms and one or more at least partially unspecified terms, as

required by independent claims 1 and 66, apply with equal force here and are reiterated

here, with regards to claims..."

Examiner respectfully disagrees with the above argument. Lee as presented in

the rejection as to demonstrate the internet searching. As the argument to the limitation

as "receiving a query comprised of one or more fully specified terms and one or more at

least partially unspecified term" the examiner addresses them above.

Applicant also argues "...claim 20 is depended on claim 1 and is allowable for the

reason as..."

Examiner respectfully disagrees with the above argument. As the argument to

the limitation as "receiving a query comprised of one or more fully specified terms and

one or more at least partially unspecified term" the examiner addresses them above.

Information Disclosure Statement

3.   The information disclosure statement (IDS) submitted on 01/25/2008. The

submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the

information disclosure statement is being considered by the examiner. The NPL Roche,

Looking for Syntatic Patterns in Texts in Papers in Computational Lexicographer,

Complex 92... could not be considered because there was no date associated with this.

Please resubmit this NPL with date for reconsideration.

Specification

4.   The specification is objected to as failing to provide proper antecedent basis for

the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction

of the following is required: computer program product.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
conditions and requirements of this title.

5.   Claim 66 is rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter. Claim 66 recites "a computer program product"

which appears that the applicant claimed a program or codes. Program or code does

not fallen into one of the four statutory classes. Rather, computer program product is

program per se or Software per se.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was
> made.

6.   Claim 1-3, 21, 25, 27, 34-36, 39 and 64-68 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Smith (US. Patent No. 6,081,804) in view of Masand et al.

(US. Patent No 6,131,092).

Regarding on claims 1 and 66, Smith teaches a method of fulfilling an information

need, comprising the steps of:

receiving a query comprised of one or more fully specified terms (word, cat...hat)

(col. 5, lines 52-67 and col. 3, lines 3-6); and

determining one or more matches for the query, wherein a criterion for

determining one of said matches specifies that a relative order of at lest one term of

said query need not be preserved with respect to at least one other term included in the

query (if the user, wants to search a search space for objects where the word "cat"

preceded the word hat where the result be always be first cat retrieval word and hat)

(col. 3, lines 15-23 and col. 5, lines 7-51);

displaying the one or more matches (an output device 104, such as a CRT

monitor, on which the results of searches are displayed) (col. 4, lines 23-24).

Smith does not explicitly discloses one or more at least partially unspecified

terms; however, Smith discloses of variety of wildcards including space parameters

such as cat...hat (*, ?, /..) (col. 5, lines 52-67 and col. 3, lines 3-6). On the other hand,

Masand discloses one or more at least partially unspecified terms (as to corresponding

to a query also comprises a series of symbols, which also represent a word, number or

other searchable feature) (col. 2, lines 26-28). These symbols in the query are

unspecified terms which require to be searched. Therefore, it would have been obvious

to one ordinary skill in the art at the time of the invention was made to modify Smith's

system to include symbols taught by Masand in order to retrieved documents with terms

and symbols as an inputted.

Regarding on claim 2, Smith teaches identifying documents in an index that

contain the one or more at least partially unspecified terms, the index including

preaanlyzed text terms appearing within a plurality of document (col. 6, lines 1-49).

Regarding on claim 3, Smith teaches converting the query into a finite state machine; and matching the finite state machine against the identified contexts (col. 6, lines 1-49).

Regarding on claim 21, Smith teaches the score reflects the number of times an instance of the match is located among the plurality of documents (col. 2, lines 7-19).

Regarding on claim 25, Smith teaches ranking the documents that contain a match, and wherein the second outputting step comprises outputting the document identifiers or locations of the documents that contain a match in an order based on the ranking weight) (col. 2, lines 7-19).

Regarding on claim 27, Smith teaches said one or more partially unspecified terms includes a syntactic or a morphological restriction (lower case or upper case) (col. 6, lines 1-49).

Regarding on claim 34, Smith teaches the index comprises locations of terms within documents (the object must be found in the first page) (col. 6, lines 1-49).

Regarding on claim 35, Smith teaches determining the location of a term in the query within a document using the index; and locating a match for the query based on the location of the term within the document (col. 3, lines 7-12).

Regarding on claim 36, Smith teaches ranking a plurality of the located matches or portions thereof (weight) (col. 2, lines 7-19).

Regarding on claim 39, Smith teaches the ranking is based on one or more features selected from the list consisting of the location of a match within a document, a weight assigned to a document that contains a match, the age of a document that

contains a match, the source of a document that contains a match, and a format feature

of a match within a document (col. 2, lines 7-19).

Regarding on claims 64 and 67, Smith teaches the query includes a delimiter

indicating a first portion of said query for which a relative order is preserved for one or

more terms included in said portion, said relative order being in accordance with a

physical position of each term in said first portion with respect to any other terms in said

first portion (col. 6, lines 1-49).

Regarding on claims 65 and 68, Smith teaches one of said at least partial

unspecified terms includes a predefined character sequence representing a matching

restriction that defines at least one of: a syntactical criteria, a morphological criteria, and

a criteria defined in accordance with a determination by a computer program, and said

one or more matches for the query are determined in accordance with said matching

restriction (col. 6, lines 1-49).

7.   Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Smith (US. Patent No. 6,081,804) in view of Masand et al. (US. Patent No 6,131,092)

and further in view of Lee et al. (US. Pub. No. 2001/0044720 A1).

Regarding on claim 17, Smith and Masand do not teach the documents are

accessible over the Internet. However, Lee teaches documents are accessible over the

Internet (paragraph 0005). Therefore, it would have been obvious to one ordinary skill

in the art at the time of the invention was made to modify Smith and Masand systems to

include documents are accessible over the Internet by Lee in order to retrieve

documents from the distance.

Regarding on claim 18, Smith and Masand do not teach the documents comprise

World Wide Web pages. However, Lee teaches teach the documents comprise World

Wide Web pages (paragraph 0005). Therefore, it would have been obvious to one

ordinary skill in the art at the time of the invention was made to modify Smith and

Masand systems to include documents comprise World Wide Web pages by Lee in

order to retrieve documents from the distance.

8.   Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith

(US. Patent No. 6,081,804) in view of Masand et al. (US. Patent No 6,131,092) and

further in view of Hobbs (US. Patent No. 6,523,022 B1).

Regarding on claim 20, Smith and Masand do not teach assigning a score to a

match. However, Hobbs discloses assigning a score to a match (as to underpush,

computers sift through large volume of information, filtering, retrieving and then ranking

in order of importance articles of current interest.." (col. 4, lines 38-40). This suggests

the concept of scoring the document depend on their match. Therefore, it would have

been obvious to one ordinary skill in the art at the time of the invention was made to

modify the teaching of Smith and Masand to include ranking the importance in order of

importance articles as taught by Hobs in order to display to the user in according of their

relevancy.

9.   Claims 4-6 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Smith (US. Patent No. 6,081,804) in view of Masand et al. (US. Patent No

6,131,092) and further Hunter (US. Patent No. 6,018,735).

Regarding on claim 4, Smith and Masand do not teach the finite state machine

is a finite state transducer. However, Hunter teaches the finite state machine is a finite

state transducer (finite-state automata include three types of states: initial state,

intermediate states, and terminal states). This suggests the usage of the finite state

machine for searching. Therefore, it would have been obvious to one ordinary skill in

the art at the time of the invention was made to modify both Smith and Masand to

include finite state machine for retrieving relevant documents using the inputted words

and symbols.

Regarding on claim 5, Smith and Masand do not teach the finite state machine

allows for the appearance of fully specified and at least partially unspecified terms in

any order in a potential matching context. However, Hunter teaches the finite state

machine allows for the appearance of fully specified and at least partially unspecified

terms in any order in a potential matching (finite-state automata include three types of

states: initial state, intermediate states, and terminal states). This suggests the finite

state machine to allow the appearance of the fully specified and at least partial specified

term in the order in a potential matching context. Therefore, it would have been obvious

to one ordinary skill in the art at the time of the invention was made to modify both

Smith and Masand to include finite state machine allows for the appearance of fully

specified and at least partially unspecified terms in any order in a potential matching

context as taught by Hunter in order to retrieves relevant documents using the inputted

words and symbols.

Regarding on claim 6, Smith and Masand do not teach the finite state machine

allows for one or more intervening words between the fully specified and at least

partially unspecified terms in a potential matching context. However, Hunter teaches

the finite state machine allows for one or more intervening words between the fully

specified and at least partially unspecified terms in a potential matching context (finite-

state automata include three types of states: initial state, intermediate states, and

terminal states). This suggests the finite state machine to allows for one or more

intervening words between the fully specified and at least partially unspecified terms in

a potential matching context. Therefore, it would have been obvious to one ordinary

skill in the art at the time of the invention was made to modify both Smith and Masand to

include finite state machine allows one or more intervening words between the fully

specified and at least partially unspecified terms in a potential matching context as

taught by Hunter in order to retrieves relevant documents using the inputted words and

symbols.

Regarding on claim 16, Smith and Masand do not teach the contexts are stored

as finite state machines. However, Hunter teaches the contexts are stored as finite

state machines (finite-state automata include three types of states: initial state,

intermediate states, and terminal states). This suggests the contexts are stored as finite

state machines. Therefore, it would have been obvious to one ordinary skill in the art at

the time of the invention was made to modify both Smith and Masand to include

contexts are stored as finite state machines as taught by Hunter in order to retrieves

relevant documents using the inputted words and symbols.

Conclusion

10.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Baoquoc N. To whose telephone number is at 571-272-

4041 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached

on Monday-Friday: 8:00 AM – 4:30 PM, EST.

       If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Breene can be reached at 571-272-4107.

       Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (703) 305-

3900.

       Any response to this action should be mailed to:
            Commissioner of Patents and Trademarks
            Washington, D.C. 20231.

       The fax numbers for the organization where this application or proceeding is

assigned are as follow:
            (703) 872-9306   [Official Communication]

BQ. To

February 21st, 2008

/Baoquoc N To/

Primary Examiner, Art Unit 2162